

IN THE ABSTRACT:

Please substitute the following Substitute Abstract for the originally filed Abstract, a marked-up copy of which is presented on the following page indicating the changes made thereto by the Substitute Abstract.

SUBSTITUTE ABSTRACT OF THE DISCLOSURE

A hydrogen supply unit concurrently generates electric power, by using a fuel cell, and hydrogen to efficiently generate hydrogen from a source gas. The hydrogen supply unit includes a reformer for reforming natural gas, a fuel cell for generating electric power by using the reformed gas from the reformer, and a purifier for purifying the hydrogen in the exhaust gas discharged from the fuel cell. The purifier includes a PEM and a PSA for conducting the purification process. The reformed gas from the reformer is used, without being subjected to purification, for the electric power generation in the fuel cell, and the purifier purifies the hydrogen in the exhaust gas discharged from the fuel cell. The offgas from the PEM is used in a heater, and the offgas from the PSA is used in the fuel cell.

IN THE ABSTRACT:

Provided below is a marked-up version of the originally filed Abstract indicating the changes made thereto by the enclosed Substitute Abstract.

Marked-Up Version of Originally Filed Abstract

A hydrogen supply unit which concurrently generates electric power₁ by using ~~use of~~ a fuel cell₁ and ~~concurrently generates~~ hydrogen, ~~taking as its object the efficient generation of~~ to efficiently generate hydrogen from a source gas. The hydrogen supply unit ~~4 comprises~~ includes a reformer ~~[[2]]~~ for reforming natural gas, a fuel cell ~~[[3]]~~ for generating electric power by ~~use of~~ using the reformed gas from the reformer ~~[[2]]~~, and a purifier ~~[[4]]~~ for purifying the hydrogen ~~from in~~ the exhaust gas discharged from the fuel cell ~~[[3]]~~. The purifier ~~4 comprises~~ includes a PEM ~~9~~ for ~~conducting purification on the basis of the membrane separation method,~~ and a PSA ~~[[11]]~~ for conducting the purification process. ~~by use of the pressure swing adsorption method. In the present invention, the~~ The reformed gas from the reformer ~~[[2]]~~ is used, without being subjected to purification, for the electric power generation in the fuel cell ~~[[3]]~~, and the purifier ~~[[4]]~~ purifies the hydrogen ~~from in~~ the exhaust gas discharged from the fuel cell ~~[[3]]~~. The offgas from the PEM ~~[[9]]~~ is used in a heater ~~[[8]]~~, and the offgas from the PSA ~~[[11]]~~ is used in the fuel cell ~~[[3]]~~. ~~Consequently, the amount of the hydrogen burnt in the heater 8 is reduced as compared to the prior art, and hence the electric power generation and the hydrogen generation can be performed by using more efficiently the hydrogen contained in the source gas.~~